

Region 7 Serving Berkeley, Charleston & Dorchester Counties

Legionellosis Fact Sheet

What Is legionellosiss?

Legionellosis is an infection caused by the bacteria *Legionella pneumophila*. The disease has two distinct forms: Legionnaires' disease, the more severe form of infection which includes pneumonia, and Pontiac fever, a milder illness.

Legionnaires' disease acquired its name in 1976 when an outbreak of pneumonia occurred among persons attending a convention of the American Legion in Philadelphia. Later, the bacterium causing the illness was named *Legionella*.

An estimated 8,000 to 18,000 people get Legionnaires' disease in the United States each year. Some people can be infected with the *Legionella* bacteria and have mild symptoms or no illness at all. While outbreaks of Legionnaires' disease receive a lot of attention, this disease usually occurs as a single, isolated case not associated with any outbreak. When outbreaks do occur, they are usually in the summer and early fall, but cases may occur year-round. About 5% to 30% of people who have Legionnaires' disease die.

What are the symptoms?

Patients with Legionnaires' disease usually have fever, chills, and a cough, which may be dry or may produce sputum. Some patients also have muscle aches, headache, tiredness, loss of appetite, and, occasionally, diarrhea. Laboratory tests may show that these patients' kidneys are not functioning properly. Chest X-rays often show pneumonia. It is difficult to distinguish Legionnaires' disease from other types of pneumonia by symptoms alone, so other tests are required for diagnosis.

Persons with Pontiac fever experience fever and muscle aches and do not have pneumonia. They generally recover in 2 to 5 days without treatment.

The time between the patient's exposure to the bacteria and the onset of illness for Legionnaires' disease is 2 to 10 days; for Pontiac fever, it is shorter, generally a few hours to 2 days.

People of any age may get Legionnaires' diasease, but the illness most often affects middle-aged and older persons, particularly those who smoke cigarettes or have chronic lung disease. Also at increased risk are persons whose immune system is suppressed by diseases such as cancer, kidney failure requiring dialysis, diabetes, or AIDS. Those that take drugs that suppress the immune system are also at higher risk.

Pontiac fever most commonly occurs in persons who are otherwise healthy.

How is legionellosis treated?

Erythromycin is the antibiotic currently recommended for treating persons with Legionnaires' disease. In severe cases, a second drug, rifampin, may also be used.

Pontiac fever requires no specific treatment.

How do people catch this disease?	Outbreaks of legionellosis have occurred after persons have breathed mists that come from a water source (e.g., air conditioning cooling towers, whirlpool spas, showers) contaminated with <i>Legionella</i> bacteria. Persons may be exposed to these mists in homes, workplaces, hospitals, or public places. Legionellosis is not passed from person to person, and there is no evidence of persons becoming infected from auto air conditioners or household window air-conditioning units.
What can be done to stop the spread of this disease?	Improved design and maintenance of cooling towers and plumbing systems to limit the growth and spread of <i>Legionella</i> organisms are the foundations of legionellosis prevention. During outbreaks, CDC and health department investigators seek to identify the source of disease transmission and recommend appropriate prevention and control measures, such as decontamination of the water source. Current research will likely identify additional prevention strategies.

For more information about legionellosis, visit: www.cdc.gov